**SSN College of Engineering, Kalavakkam**

**Department of Computer Science and Engineering**

**III Semester - CSE**

# UCS 1312 Data Structures Lab Laboratory

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| **Academic Year: 2019-2020** | **Batch: 2018-2022** |

**Exercise 13: Implementation of Hash Table using separate chaining collision resolution**

**strategy**

The HashTableADT contains the size of hash table and list of addresses pointing to the corresponding lists. Hash function to be used for the insertion of elements is ***x mod tableSize***.

* void init(HashTableADT \*H) – To initialize the size and the header nodes of

the lists

* void insertElement (HashTableADT \*H, int x)– To insert the input key into the hash

table using the hash function

* void searchElement(HashTableADT \*H, int key) – Searching an element in the hash

table

* void displayHT(HashTableADT \*H) – Display the elements in the hash table

**Note:**

1. Implement HashTableADT with the specified operations in HashTableADTImpl.h
2. Write a menu driven application to utilize the HashTableADT.